

Title (en)

CHANNELED ENERGY ABSORPTION IMPACT SYSTEM

Title (de)

GEWELLTE ENERGIE ABSORBIERENDE STRUKTUR

Title (fr)

SYSTEME ANTICHOC A ABSORPTION D'ENERGIE PAR CANNELURES

Publication

EP 1244576 A4 20050302 (EN)

Application

EP 00978788 A 20001117

Priority

- US 0031707 W 20001117
- US 47271899 A 19991223

Abstract (en)

[origin: US6231095B1] A channeled energy absorption unit for a vehicle bumper impact system to absorb impact energy and forestall or minimize damage to vehicle frame rails under impact. The basic embodiment is a tube with one end flared and welded at a hole in one end plate or directly to the vehicle frame rail. When loaded axially, the tube splits, peels and is inverted to absorb impact in a generally square wave energy absorption. Preferred channels in the tube stabilize the failure mode during this process to assure a predetermined energy absorption characteristic.

IPC 1-7

B60R 19/34

IPC 8 full level

B60R 19/34 (2006.01)

CPC (source: EP US)

B60R 19/34 (2013.01 - EP US)

Citation (search report)

- [XA] EP 0791507 A2 19970827 - DYNAMIT NOBEL KUNSTSTOFF GMBH [DE]
- [XA] DE 29710488 U1 19970814 - REICHE GMBH & CO KG AUTOMOTIVE [DE]
- [XA] US 3146014 A 19640825 - KROELL CHARLES K
- [A] DE 19623449 A1 19980102 - DAIMLER BENZ AG [DE]
- [A] DE 4316164 A1 19941117 - BENTELER WERKE AG [DE]
- [A] EP 0763448 A1 19970319 - HOOGOEVENS STAAL BV [NL]
- See references of WO 0147749A1

Designated contracting state (EPC)

DE FR IT LI

DOCDB simple family (publication)

US 6231095 B1 20010515; AU 1621101 A 20010709; EP 1244576 A1 20021002; EP 1244576 A4 20050302; WO 0147749 A1 20010705

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